

## AMENDMENTS TO THE CLAIMS

Pursuant to 37 C.F.R. § 1.121 the following listing of claims will replace all prior versions, and listings, of claims in the application.

1-35 cancel

36. (New) A method of monitoring data events occurring in a computer host application, the method comprising the steps of:

storing in a database a host application model, the model including a GuiFramework that models the host application interface controls that reflect the different states of the host application;

extracting the GuiFramework from the database and expanding the GuiFramework into an interlinked, indexed network structure in memory;

initializing data structures including a session structure;

intercepting, during execution of the host application, one or more operating system messages to obtain a plurality of information relating to a plurality of data events;

organizing the intercepted data events in the session structure; and

analyzing the data events to make automated inference of a user's interaction with the host application.

37. (New) The method of claim 36, further including the step of caching portions of the GuiFramework.



removing these actions from the session structure.

44. (New) The method of claim 35, wherein the GuiFramework models navigational states of the host application.

45. (New) A method of identifying logical patterns from a set of a user's inputs to a computer host application, the method comprising the steps of:

storing in a database a host application model, the model including a GuiFramework that models the host application interface controls that reflect the different states of the host application;

extracting the GuiFramework from the database and expanding the GuiFramework into an interlinked, indexed network structure in memory;

intercepting, during execution of the host application, one or more operating system messages to obtain information relating to a plurality of the user's inputs;

polling the user inputs to detect user activation of an interface device;

creating, upon detection of the user's activation, an action structure that includes status flags to mark structures;

accumulating the action structure in a database;

searching the accumulated action structures to detect sequences capable of being processed into an interactive custom accelerated procedure (ICAP); and

generating the ICAP to automate the detected sequences.



52. (New) A method of monitoring host application events to locate frequent user sequences, comprising the steps of:

locating action events having the highest interface level position;

inspecting action structures for continuous property values representing ordinal positions with the host application;

identifying start and end points for the continuous action structures; and

generating reports and statistics relating to frequency of use and manner of use of interface objects accessed by the continuous action structures.

53. (New) A method of diagnosing operation of a host application operating under a computer operating system, the method comprising the steps of:

injecting a hook component and subclassing components into the host application, where the host application is supported by a container provided by the computer operating system;

intercepting events transmitted from the container or the operating system prior to the events reaching the host application;

interpreting the intercepted events into higher level logical events;

processing the higher level logical events to identify a sequence of events capable of being replicated; and

replicating the operation of the host application using the replicated sequences;

wherein the replicating step results in the diagnosis and analysis of the host application operation.